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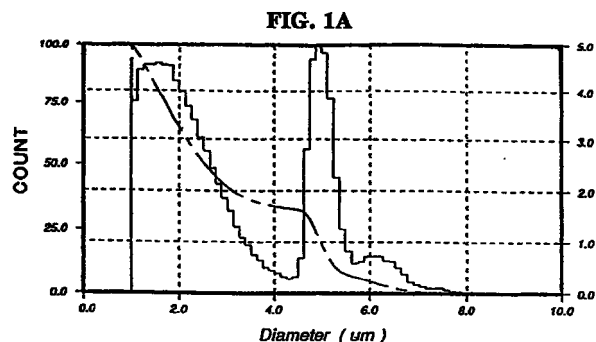
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(54) **Synthetic polymer particles for use as standards and calibrators in flow cytometry**

(57) The invention describes novel methods for calibrating or standardizing flow cytometry instruments using synthetic polymer particles or beads having physical properties which provide advantages for their use in such instruments. The polymer particles or beads employed in the calibration methods are spherical, have an average particle diameter of from about 1 to about 8 microns, a relatively narrow particle distribution and a low refractive index, i.e., from about 1.35 to about 1.45. The particles are safe, stable for long time periods and are particularly suitable for employment as hematology analyzer calibration substances. The invention provides an advantageous improvement over the types of standards currently used to calibrate a variety of instruments that rely on light scatter combined with other parameters to identify and measure biological particles or cells, as well as nonbiological particles. In particular, using the calibration/standardization method and polymer particles according to the present invention allows hematology instruments to be calibrated and standardized for subsequent accurate and reliable determinations of red blood cells, reticulocytes, white blood cells and platelets in whole blood samples.



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EUROPEAN SEARCH REPORT

Application Number
EP 98 11 1504

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The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		29 October 1999	Zinngrebe, U
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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